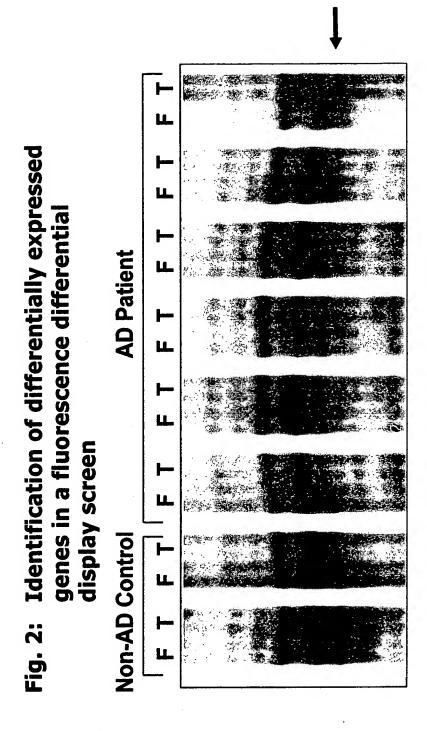
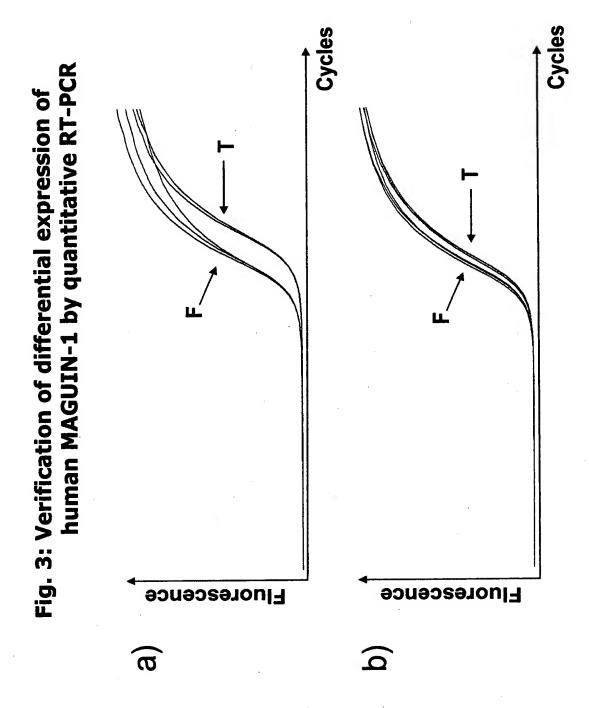


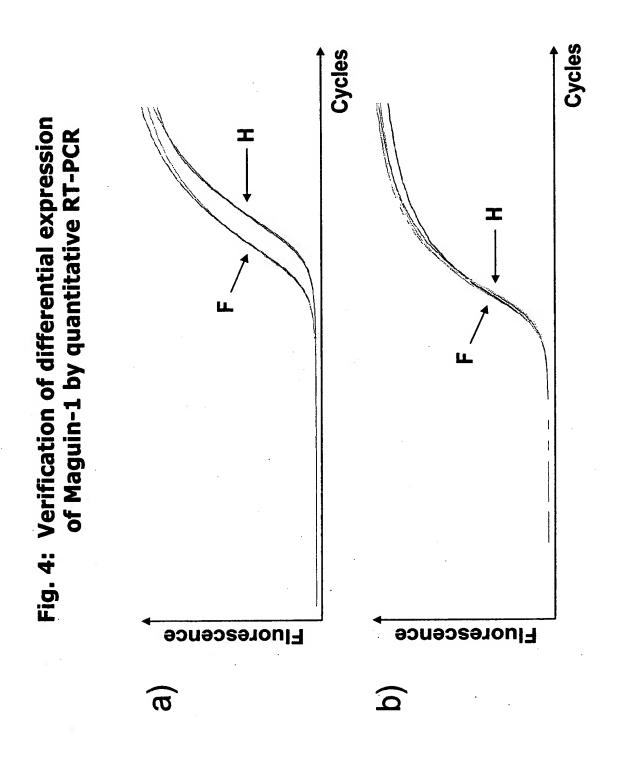
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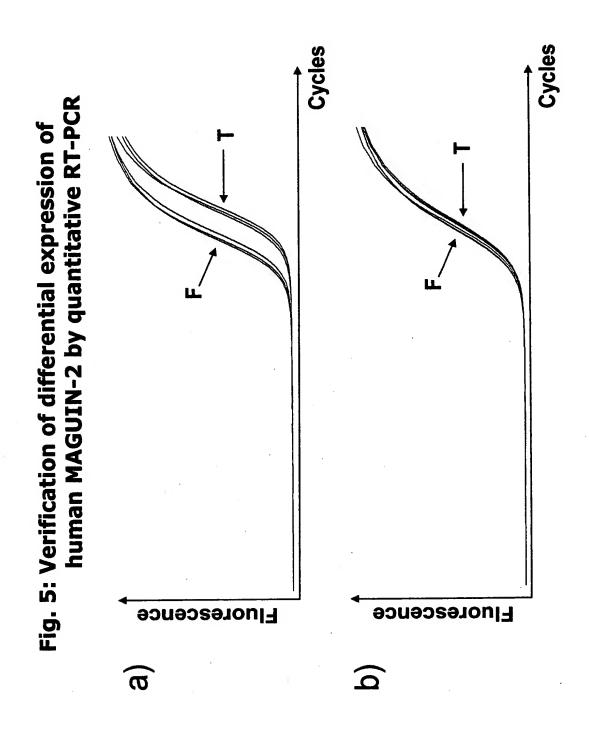


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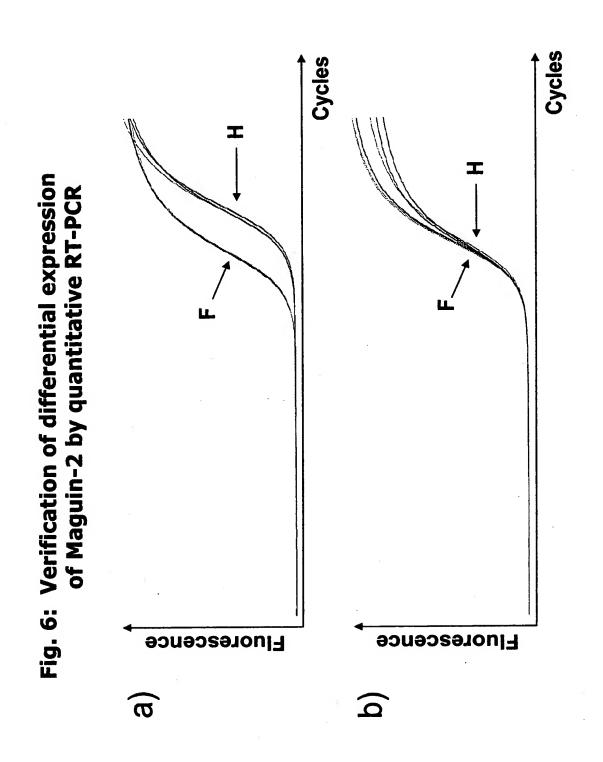
[]







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Fig. 7: SEQ ID NO. 1: amino acid sequence of human MAGUIN-1 protein

Length: 1034 aa

	1	MALIMEPVSK WSPSQVVDWM KGLDDCLQQY IKNFEREKIS GDQLLRITHQ
	51	ELEDLGVSRI GHQELILEAV DLLCALNYGL ETENLKTLSH KLNASAKNLQ
1	01	NFITGRRRSG HYDGRTSRKL PNDFLTSVVD LIGAAKSLLA WLDRSPFAAV
1	51	TDYSVTRNNV IQLCLELTTI VQQDCTVYET ENKILHVCKT LSGVCDHIIS
2	01	LSSDPLVSQS AHLEVIQLAN IKPSEGLGMY IKSTYDGLHV ITGTTENSPA
2	51	DRCKKIHAGD EVIQVNHQTV VGWQLKNLVN ALREDPSGVI LTLKKRPQSM
3	01	LTSAPALLKN MRWKPLALQP LIPRSPTSSV ATPSSTISTP TKRDSSALQD
3	51	LYIPPPPAEP YIPRDEKGNL PCEDLRGHMV GKPVHKGSES PNSFLDQEYR
4	01	KRFNIVEEDT VLYCYEYEKG RSSSQGRRES TPTYGKLRPI SMPVEYNWVG
4	51	DYEDPNKMKR DSRRENSLLR YMSNEKIAQE EYMFQRNSKK DTGKKSKKKG
5	01	DKSNSPTHYS LLPSLQMDAL RQDIMGTPVP ETTLYHTFQQ SSLQHKSKKK
5	51	NKGPIAGKSK RRISCKDLGR GDCEGWLWKK KDAKSYFSQK WKKYWFVLKI
6	601	ASLYWYINEE DEKAEGFISL PEFKIDRASE CRKKYAFKAC HPKIKSFYFA
6	51	AEHLDDMNRW LNRINMLTAG YAERERIKQE QDYWSESDKE EADTPSTPKQ
7	01	DSPPPPYDTY PRPPSMSCAS PYVEAKHSRL SSTETSQSQS SHEEFRQEVT
7	51	GSSAVSPIRK TASQRRSWQD LIETPLTSSG LHYLQTLPLE DSVFSDSAAI
8	01	SPEHRRQSTL PTQKCHLQDH YGPYPLAESE RMQVLNGNGG KPRSFTLPRD
8	51	SGFNHCCLNA PVSACDPQDD VQPPEVEEEE EEEEEEGEAA GENIGEKSES
9	01	REEKLGDSLQ DLYRALEQAS LSPLGEHRIS TKMEYKLSFI KRCNDPVMNE
9	51	KLHRLRILKS TLKAREGEVA IIDKVLDNPD LTSKEFQQWK QMYLDLFLDI
10	01	CQNTTSNDPL SISSEVDVIT SSLAHTHSYI ETHV*

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Fig. 8: Alignment of SEQ ID NO. 1, human MAGUIN-1, with rat MAGUIN-1

Length: 1034 aa

	MALIMEPVSKWSPSQVVDWMKGLDDCLQQYIKNFEREKISGDQLLRITHQ	50
1	MALIMEPVSKWSPSQVVDWMKGLDDCLQQYIKNFEREKISGDQLLRITHQ	50
51	ELEDLGVSRIGHQELILEAVDLLCALNYGLETENLKTLSHKLNASAKNLQ	100
51	ELEDLGVSRIGHQELILEAVDLLCALNYGLETENLKTLSHKLNASAKNLQ	100
101	NFITGRRRSGHYDGRTSRKLPNDFLTSVVDLIGAAKSLLAWLDRSPFAAV	150
101	NFITGRRRSGHYDGRTSRKLPNDFLTSVVDLIGAAKSLLAWLDRSPFAAV	150
151	TDYSVTRNNVIQLCLELTTIVQQDCTVYETENKILHVCKTLSGVCDHIIS	200
151	TDYSVTRNNVIQLCLELTTIVQQDCTVYETENKILHVCKTLSGVCDHIIS	200
201	LSSDPLVSQSAHLEVIQLANIKPSEGLGMYIKSTYDGLHVITGTTENSPA	250
201	LSSDPLVSQSAHLEVIQLANIKPSEGLGMYIKSTYDGLHVITGTTENSPA	250
251	DRCKKIHAGDEVIQVNHQTVVGWQLKNLVNALREDPSGVILTLKKRPQSM	300
251	DRCKKIHAGDEVIQVNHQTVVGWQLKNLVNALREDPSGVILTLKKRPQSM	300
301	LTSAPALLKNMRWKPLALQPLIPRSPTSSVATPSSTISTPTKRDSSALQD	350
301	LTSAPALLKNMRWKPLALQPLIPRSPTSSVATPSSTISTPTKRDSSALQD	350
351	LYIPPPPAEPYIPRDEKGNLPCEDLRGHMVGKPVHKGSESPNSFLDQEYR	400
351	LYIPPPPAEPYIPRDEKGNLPCEDLRGHMVGKPVHKGSESPNSFLDQEYR	400
401	KRFNIVEEDTVLYCYEYEKGRSSSQGRRESTPTYGKLRPISMPVEYNWVG	450
401		450
451	DYEDPNKMKRDSRRENSLLRYMSNEKIAQEEYMFQRNSKKDTGKKSKKKG	500
451	DYEDPNKMKRDSRRENSLIRYMSNEKIAOEEYMFORNSKKDTGKKSKKKG	500

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501	DKSNSPTHYSLLPSLQMDALRQDIMGTPVPETTLYHTFQQSSLQHKSKKK	550
501	DKSTSPTHYSLLPSLQMDALRQDIMGTPVPETTLYHTFQQSSLQHKSKKK	550
551	NKGPIAGKSKRRISCKDLGRGDCEGWLWKKKDAKSYFSQKWKKYWFVLKD	600
551	NKGAIAGKSKRRISCKDLGRGDCEGWLWKKKDAKSYFSQKWKKYWFVLKD	600
601	ASLYWYINEEDEKAEGFISLPEFKIDRASECRKKYAFKACHPKIKSFYFA	650
601	ASLYWYINEEDEKAEGFISLPEFKIDRASECRKKYAFKACHPKIKSFYFA	650
651	AEHLDDMNRWLNRINMLTAGYAERERIKQEQDYWSESDKEEADTPSTPKQ	700.
651	AEHLDDMNRWLNRINMLTAGYAERERIKQEQDYWSESDKEEADTPSTPKQ	700
701	DSPPPPYDTYPRPPSMSCASPYVEAKHSRLSSTETSQSQSSHEEFRQEVT	750
701	DSPPPPYDTYPRPPSMSCASPYVEAKHSRLSSTETSQSQSSHEEFRQEVT	750
751	GSSAVSPIRKTASQRRSWQDLIETPLTSSGLHYLQTLPLEDSVFSDSAAI	800
751	GSSAVSPIRKTASQRRSWQDLIETPLTSSGLHYLQTLPLEDSVFSDSAAI	800
801	SPEHRRQSTLPTQKCHLQDHYGPYPLAESERMQVLNGNGGKPRSFTLPRD	850
801	SPEHRRQSTLPTQKCHLQDHYGPYPLAESERMQVLNGNGGKPRSFTLPRD	850
851	SGFNHCCLNAPVSACDPQDDVQPPEVEEEEEEEEEEGEAAGENIGEKSES	900
851	SGFNHCCLNAPVSACDPQDDIQPPEVEEEEEEEEEEAAGENIGEKNEN	898
901	REEKLGDSLQDLYRALEQASLSPLGEHRISTKMEYKLSFIKRCNDPVMNE	950
899		948
951	KLHRLRILKSTLKAREGEVAIIDKVLDNPDLTSKEFQQWKQMYLDLFLDI	1000
949		998
001	CONTTSNDPLSISSEVDVITSSLAHTHSYIETHV 1034	
999		

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Fig. 9: SEQ ID NO. 2: amino acid sequence of human MAGUIN-2 protein

Length: 898 aa

1 MALIMEI VOIL WOLDOV VD WIM ROLDDOLOGI HEM LICENSIS ODGELIC	VVDWM KGLDDCLQQY IKNFEREKIS GDQLLRI	MALIMEPVSK WSPSQVVDWM KGLDDCLQQY IKNFEREKI
--	-------------------------------------	--

- 51 ELEDLGVSRI GHQELILEAV DLLCALNYGL ETENLKTLSH KLNASAKNLQ
- 101 NFITGRRRSG HYDGRTSRKL PNDFLTSVVD LIGAAKSLLA WLDRSPFAAV
- 151 TDYSVTRNNV IQLCLELTTI VQQDCTVYET ENKILHVCKT LSGVCDHIIS
- 201 LSSDPLVSQS AHLEVIQLAN IKPSEGLGMY IKSTYDGLHV ITGTTENSPA
- 251 DRCKKIHAGD EVIQVNHQTV VGWQLKNLVN ALREDPSGVI LTLKKRPQSM
- 301 LTSAPALLKN MRWKPLALQP LIPRSPTSSV ATPSSTISTP TKRDSSALQD
- 351 LYIPPPPAEP YIPRDEKGNL PCEDLRGHMV GKPVHKGSES PNSFLDQEYR
- 401 KRFNIVEEDT VLYCYEYEKG RSSSQGRRES TPTYGKLRPI SMPVEYNWVG
- 451 DYEDPNKMKR DSRRENSLLR YMSNEKIAQE EYMFQRNSKK DTGKKSKKKG
- 501 DKSNSPTHYS LLPSLQMDAL RQDIMGTPVP ETTLYHTFQQ SSLQHKSKKK
- 551 NKGPIAGKSK RRISCKDLGR GDCEGWLWKK KDAKSYFSQK WKKYWFVLKD
- 601 ASLYWYINEE DEKAEGFISL PEFKIDRASE CRKKYAFKAC HPKIKSFYFA
- 651 AEHLDDMNRW LNRINMLTAG YAERERIKQE QDYWSESDKE EADTPSTPKQ
- 701 DSPPPPYDTY PRPPSMSCAS PYVEAKHSRL SSTETSQSQS SHEEFRQEVT
- 751 GSSAVSPIRK TASQRRSWQD LIETPLTSSG LHYLQTLPLE DSVFSDSAAI
- 801 SPEHRROSTL PTOKCHLODH YGPYPLAESE RMQVLNGNGG KPRSFTLPRD
- 851 SGFNHCCLNA PVSACDPQDD VQPPEVEEEE EEEEEEGEAA GENIGEKS*

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Figure 10: Alignment of SEQ ID NO. 2, human MAGUIN-2, with rat MAGUIN-2

Length: 898 aa

	MALIMEPVSKWSPSQVVDWMKGLDDCLQQYIKNFEREKISGDQLLRITHQ	50
1	MALIMEPVSKWSPSQVVDWMKGLDDCLQQYIKNFEREKISGDQLLRITHQ	50
51	ELEDLGVSRIGHQELILEAVDLLCALNYGLETENLKTLSHKLNASAKNLQ	100
51	ELEDLGVSRIGHQELILEAVDLLCALNYGLETENLKTLSHKLNASAKNLQ	100
101	NFITGRRRSGHYDGRTSRKLPNDFLTSVVDLIGAAKSLLAWLDRSPFAAV	150
101	NFITGRRRSGHYDGRTSRKLPNDFLTSVVDLIGAAKSLLAWLDRSPFAAV	150
151	TDYSVTRNNVIQLCLELTTIVQQDCTVYETENKILHVCKTLSGVCDHIIS	200
151		200
201	LSSDPLVSQSAHLEVIQLANIKPSEGLGMYIKSTYDGLHVITGTTENSPA	250
201		250
251	DRCKKIHAGDEVIQVNHQTVVGWQLKNLVNALREDPSGVILTLKKRPQSM	300
251		300
301	LTSAPALLKNMRWKPLALQPLIPRSPTSSVATPSSTISTPTKRDSSALQD	350
301		350
351	LYIPPPPAEPYIPRDEKGNLPCEDLRGHMVGKPVHKGSESPNSFLDQEYR	400
351		400
401		450
401		450
451		500
451		500
T U T	DIUDING TOTAL CONTROL CONTROL STATE TO THE STATE OF THE S	

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501	DKSNSPTHYSLLPSLQMDALRQDIMGTPVPETTLYHTFQQSSLQHKSKKK	550
501		550
551	NKGPIAGKSKRRISCKDLGRGDCEGWLWKKKDAKSYFSQKWKKYWFVLKD	600
551	NKGAIAGKSKRRISCKDLGRGDCEGWLWKKKDAKSYFSQKWKKYWFVLKD	600
601	ASLYWYINEEDEKAEGFISLPEFKIDRASECRKKYAFKACHPKIKSFYFA	650
601	ASLYWYINEEDEKAEGFISLPEFKIDRASECRKKYAFKACHPKIKSFYFA	650
651	AEHLDDMNRWLNRINMLTAGYAERERIKQEQDYWSESDKEEADTPSTPKQ	700
651	AEHLDDMNRWLNRINMLTAGYAERERIKQEQDYWSESDKEEADTPSTPKQ	700
701	DSPPPPYDTYPRPPSMSCASPYVEAKHSRLSSTETSQSQSSHEEFRQEVT	750
701	DSPPPPYDTYPRPPSMSCASPYVEAKHSRLSSTETSQSQSSHEEFRQEVT	750
751	GSSAVSPIRKTASQRRSWQDLIETPLTSSGLHYLQTLPLEDSVFSDSAAI	800
751	GSSAVSPIRKTASQRRSWQDLIETPLTSSGLHYLQTLPLEDSVFSDSAAI	800
801	SPEHRRQSTLPTQKCHLQDHYGPYPLAESERMQVLNGNGGKPRSFTLPRD	850
801	SPEHRRQSTLPTQKCHLQDHYGPYPLAESERMQVLNGNGGKPRSFTLPRD	850
851	SGFNHCCLNAPVSACDPQDDVQPPEVEEEEEEEEEEEGEAAGENIGEKS 8	98
851	SGFNHCCLNAPVSACDPQDDIQPPEVEEEEEEEEE. EAAGENIGEKS 8	96

-13/26-Fig. 11: SEQ ID NO. 3: nucleotide sequence of human MAGUIN-1 coding sequence

Length: 3105 bp

	_					
1	ATGGCTCTGA	TAATGGAACC	GGTGAGCAAA	TGGTCTCCGA	GTCAAGTAGT	GGACTGGATG
61	AAAGGTCTTG	ATGACTGTTT	GCAGCAGTAT	ATTAAGAACT	TTGAGAGGGA	GAAGATCAGT
121	GGGGACCAGC	TGCTGCGCAT	TACACATCAG	GAGCTAGAAG	ATCTGGGGGT	CAGCCGCATT
181	GGCCATCAGG	AACTGATCTT	GGAAGCAGTT	GACCTTCTGT	GTGCATTGAA	TTATGGCTTG
241	GAAACAGAAA	ATCTAAAAAC	CCTTTCTCAC	AAGTTGAATG	CATCTGCCAA	AAATCTGCAG
301	AATTTTATAA	CAGGAAGGAG	AAGGAGTGGC	CATTATGATG	GGAGGACCAG	CCGAAAATTG
361	CCAAACGACT	TTCTGACCTC	AGTTGTGGAT	CTGATTGGAG	CAGCCAAGAG	TCTGCTTGCC
421	TGGTTGGACA	GGTCACCATT	TGCTGCTGTG	ACAGACTATT	CAGTTACAAG	AAATAATGTC
			AACAACAATT			
			GTGTAAAACT			
601	CTGTCGTCAG	ATCCTCTGGT	TTCACAGTCT	GCTCACCTGG	AAGTGATTCA	ACTGGCAAAC
661	ATTAAACCAA	GCGAAGGGCT	GGGTATGTAT	ATTAAATCTA	CATATGATGG	CCTCCATGTA
			TTCACCTGCA			
			TCAGACTGTG			
841	GCACTACGAG	AGGACCCGAG	TGGTGTTATC	TTAACTTTGA	AAAAGCGACC	TCAGAGCATG
			ACTGAAAAAT			
			AAGCAGCGTT			
1021			CCTCCAGGAT			
1081			AGGAAACCTT			
			ATCTGAATCA			
			AGAAGATACT			
			ACGAGAAAGC			
			TTGGGTGGGG			
			TCTACTTCGG			
			CAGCAAAAAG			
			TCACTATTCA			
			TCCTGTGCCA			
			AAAGAAGAAA			
			TCTTGGCCGT			
			TTCACAGAAA			
			TAATGAGGAG			
			AGCCAGTGAA			
1921	CATCCTAAAA	TCAAAAGCTT	TTATTTTGCT	GCTGAACATC	TTGATGATAT	GAACAGGTGG
			GACTGCAGGA			
			TGACAAGGAA			
			TGATACATAC			
			TAGCCGACTT			
			GGAAGTAACT			
			CTGGCAGGAT			
			GCCCCTGGAG			
			GTCTACCCTG			
			TGAGAGTGAG			
			GCCTCGAGAT			
			ACAGGATGAC			
			GGAGGCAGCA			
			CTCATTGCAA			
			TCGTATTTCA			
			AATGAATGAA			
			GGAAGTAGCC			
			ACAATGGAAG			
			TGACCCACTG			TGTAATCACT
3061	TCCTCTCTAG	CACACACTCA	TTCATACATT	GAAACGCATG	TCTAA	

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Fig. 12: SEQ ID NO. 4: nucleotide sequence of human MAGUIN-2 coding sequence

Length: 2697 bp

1	ATGGCTCTGA	TAATGGAACC	GGTGAGCAAA	TGGTCTCCGA	GTCAAGTAGT
51	GGACTGGATG	AAAGGTCTTG	ATGACTGTTT	GCAGCAGTAT	ATTAAGAACT
101	TTGAGAGGGA	GAAGATCAGT	GGGGACCAGC	TGCTGCGCAT	TACACATCAG
151	GAGCTAGAAG	ATCTGGGGGT	CAGCCGCATT	GGCCATCAGG	AACTGATCTT
201	GGAAGCAGTT	GACCTTCTGT	GTGCATTGAA	TTATGGCTTG	GAAACAGAAA
251	ATCTAAAAAC	CCTTTCTCAC	AAGTTGAATG	CATCTGCCAA	AAATCTGCAG
301	AATTTTATAA	CAGGAAGGAG	AAGGAGTGGC	CATTATGATG	GGAGGACCAG
351				AGTTGTGGAT	
401	CAGCCAAGAG	TCTGCTTGCC	TGGTTGGACA	GGTCACCATT	TGCTGCTGTG
451	ACAGACTATT	CAGTTACAAG	AAATAATGTC	ATACAACTCT	GCCTGGAGTT
501	AACAACAATT	GTGCAACAGG	ATTGTACTGT	ATATGAAACA	GAGAATAAAA
551	TTCTTCACGT	GTGTAAAACT	CTTTCTGGAG	TCTGTGACCA	CATCATATCC
601	CTGTCGTCAG	ATCCTCTGGT	TTCACAGTCT	GCTCACCTGG	AAGTGATTCA
651				GGGTATGTAT	
701				CCACAGAAAA	
751				GAAGTGATTC	
801				TTTGGTGAAT	
851				AAAAGCGACC	
901				ATGAGATGGA	- V
951				AAGCAGCGTT	
1001				ACAGTTCTGC	
1051				TATATTCCCA	
1101				ACATATGGTG	
1151				TTCTGGATCA	
1201				GTCTTATATT	
1251				ACGAGAAAGC	
1301				TGGAATATAA	
1351				GATAGTAGAA	
			ATGAAAAGAT		
1401	TCTACTTCGG			AGAAGTCAAA	
1451				TTGCTACCTA	
1501					
1551			TCATGGGCAC		
1601				AGCACAAATC	
1651				AGACGAATTT	
1701				TTGGAAAAAG	
1751	AGAGTTACTT			ATTGGTTTGT	
1801	GCATCCCTTT			GATGAAAAAG	
1851	CATTAGCCTG			AGCCAGTGAA	
1901	AATATGCATT			TCAAAAGCTT	
1951	GCTGAACATC			CTTAACAGAA	
2001				TAAGCAGGAA	
2051				CTCCATCAAC	
2101				CCACGACCTC	
2151				TAGCCGACTT	
2201				AGTTTCGCCA	
2251				ACAGCCAGTC	
2301				AAGTTCAGGC	
2351				TCTCTGACTC	
2401				CCAACTCAGA	
2451				TGAGAGTGAG	
2501				GTTTTACTCT	
2551	AGCGGGTTCA	ACCATTGCTG	TCTGAaTGCT	CCAGTTAGTG	CCTGTGACCC
2601				GGAAGAGGAG	
2651	AGGAGGAAGG	GGAGGCAGCA	GGGGAAAACA	TAGGAGAAAA	AAGCTAA

-15/26-Fig. 13: SEQ ID NO. 5: nucleotide sequence of human MAGUIN-1 cDNA

Length: 5749 bp

			•			
1	CGGGCAGCTA	GTCGTGCTCG	GGGCTTCACT	CCCGCGCGTG	AGGCGAGCGG	GCAAGTTGGC
61	TGAGGGCGTG	CGGCAGAGGC	TGCTTCCCTC	GGCGACGCGA	CCCCTCAGCA	ACTCAAGCTA
121	TGAACTGAAG	CTCCCTAGGG	ACGGAGACCG	GAGCGGAGCG	GCGGAGGCAG	CAGCAGCAGC
181	AGCAGCAGCA	GCAGCAGCAG	CAGCCGCCGC	CGCCGCCGCC	TTAGCGGGAA	CTGAGCAGAC
241	CCGGCGCGGA	GCCACGACTC	CTGCACGTTT	ACCTCCCTGT	CGCCGTTCCT	GCCGGCGGTT
301	GGCTAAAAGA	CGTTACAGCC	GCGAGACCCG	ACACACAAAA	GCCGCTTTCT	CCGCGCCGCC
361	CGCCCAGGGA	GGCTGCGGCC	AGCAAGGGAC	CCCACCTGAG	AGCAGCTCGG	GCTGCTGAGT
421	TCGTTTTGTG	TCTGAGCTCT	GCGCTCTGCA	CGGAACCGAC	CCCGTACCCA	TGGCTCTGAT
481	AATGGAACCG	GTGAGCAAAT	GGTCTCCGAG	TCAAGTAGTG	GACTGGATGA	AAGGTCTTGA
541	TGACTGTTTG	CAGCAGTATA	TTAAGAACTT	TGAGAGGGAG	AAGATCAGTG	GGGACCAGCT
601	GCTGCGCATT	ACACATCAGG	AGCTAGAAGA	TCTGGGGGTC	AGCCGCATTG	GCCATCAGGA
661	ACTGATCTTG	GAAGCAGTTG	ACCTTCTGTG	TGCATTGAAT	TATGGCTTGG	AAACAGAAAA
721	TCTAAAAACC	CTTTCTCACA	AGTTGAATGC	ATCTGCCAAA	AATCTGCAGA	ATTTTATAAC
781	AGGAAGGAGA	AGGAGTGGCC	ATTATGATGG	GAGGACCAGC	CGAAAATTGC	CAAACGACTT
841	TCTGACCTCA	GTTGTGGATC	TGATTGGAGC	AGCCAAGAGT	CTGCTTGCCT	GGTTGGACAG
901	GTCACCATTT	GCTGCTGTGA	CAGACTATTC	AGTTACAAGA	AATAATGTCA	TACAACTCTG
961	CCTGGAGTTA	ACAACAATTG	TGCAACAGGA	TTGTACTGTA	TATGAAACAG	AGAATAAAAT
1021	TCTTCACGTG	TGTAAAACTC	TTTCTGGAGT	CTGTGACCAC	ATCATATCCC	TGTCGTCAGA
1081	TCCTCTGGTT	TCACAGTCTG	CTCACCTGGA	AGTGATTCAA	CTGGCAAACA	TTAAACCAAG
1141	CGAAGGGCTG	GGTATGTATA	TTAAATCTAC	ATATGATGGC	CTCCATGTAA	TTACTGGAAC
1201	CACAGAAAAT	TCACCTGCAG	ATCGGTGCAA	GAAAATCCAT	GCTGGCGATG	AAGTGATTCA
1261	AGTTAATCAT	CAGACTGTGG	TGGGGTGGCA	GTTGAAAAAT	TTGGTGAATG	CACTACGAGA
1321	GGACCCGAGT	GGTGTTATCT	TAACTTTGAA	AAAGCGACCT	CAGAGCATGC	TTACCTCAGC
1381	ACCAGCTTTA	CTGAAAAATA	TGAGATGGAA	GCCCCTTGCT	CTGCAGCCTC	TTATACCTAG
	AAGTCCCACA					
1501	CAGTTCTGCC	CTCCAGGATC	TCTACATTCC	CCCTCCTCCT	GCAGAACCAT	ATATTCCCAG
	GGATGAAAAA					
1621	GCATAAGGGA	TCTGAATCAC	CAAATTCATT	TCTGGATCAG	GAATATCGAA	AGAGATTTAA
1681	TATTGTCGAA	GAAGATACTG	TCTTATATTG	CTATGAATAT	GAAAAAGGAA	GATCAAGTAG
1741	TCAAGGAAGA	CGAGAAAGCA	CCCCAACTTA	TGGCAAGCTA	CGACCTATAT	CTATGCCAGT
1801	GGAATATAAT	TGGGTGGGG	ACTATGAAGA	TCCAAATAAG	ATGAAGAGAG	ATAGTAGAAG
1861	AGAAAACTCT	CTACTTCGGT	ATATGAGCAA	TGAAAAGATT	GCTCAAGAAG	AATACATGTT
1921	TCAGAGAAAC	AGCAAAAAGG	ACACAGGGAA	GAAGTCAAAA	AAGAAGGGTG	ATAAGAGTAA
	TAGCCCAACT					
	CATGGGCACT					
2101	GCACAAATCA	AAGAAGAAAA	ACAAAGGTCC	TATAGCAGGC	AAGAGCAAAA	GACGAATTTC
	TTGCAAAGAT					
2221	GAGTTACTTT	TCACAGAAAT	GGAAAAAATA	TTGGTTTGTC	CTAAAGGATG	CATCCCTTTA
	TTGGTATATT					
	AATTGATAGA					
	CAAAAGCTTT					
	TAATATGCTG					
	GAGTGAGAGT					
	ACCCCCATAT					
	AGCAAAACAT					
	GTTTCGCCAG					
	GCGCCGCTCC					
2821	TCAGACTCTG	CCCCTGGAGG	ATTCTGTCTT	CTCTGACTCC	GCGGCCATCT	CCCCAGAGCA

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2881	CAGGCGGCAG	TCTACCCTGC	CAACTCAGAA	ATGCCACCTG	CAGGATCACT	ATGGGCCATA
2941	CCCCTTAGCT	GAGAGTGAGA	GGATGCAAGT	GCTAAATGGA	AATGGGGGCA	AGCCTCGAAG
3001	TTTTACTCTG	CCTCGAGATA	GCGGGTTCAA	CCATTGCTGT	CTGAATGCTC	CAGTTAGTGC
3061	CTGTGACCCA	CAGGATGACG	TGCAACCCCC	AGAGGTGGAG	GAAGAGGAGG	AGGAGGAGGA
3121	GGAGGAAGGG	GAGGCAGCAG	GGGAAAACAT	AGGAGAAAAA	AGTGAAAGCA	GAGAAGAAAA
3181	GTTAGGAGAC	TCATTGCAAG	ATTTATACAG	GGCACTGGAG	CAGGCCAGTC	TGTCACCACT
3241	AGGAGAACAT	CGTATTTCAA	CCAAGATGGA	ATACAAGCTA	TCATTTATAA	AAAGATGTAA
3301	TGATCCTGTA	ATGAATGAAA	AACTACACCG	GCTGAGAATT	CTCAAAAGCA	CTTTAAAGGC
3361	CAGAGAAGGG	GAAGTAGCCA	TTATCGATAA	AGTCCTAGAC	AATCCAGACT	TGACATCTAA
3421	AGAATTCCAA	CAATGGAAGC	AGATGTACCT	CGACCTTTTC	TTGGATATCT	GTCAAAATAC
		GACCCACTGA				
3541	ACACACTCAT	TCATACATTG	AAACGCATGT	CTAAATGTAT	TCTGCCTTCA	GACCATCTAG
3601	TACCTGCTGG	TACTCTGAAC	AAGTATATAA	GGTAGTTTTT	ATATCAATGT	GTGGAACACT
3661	TGACAAGCTA	TACTTTAATG	TTACCAAACT	ATATGAAACA	AACCATATAT	GGTCACAATA
3721	CCACTATCTT	TAATGAGCAT	TTGTATATTT	TATATGCAAC	AGTGCTCAGC	TTATGTTTAC
3781	CATGTGCAAA	ATCAACTGTC	TTTAATGACT	TAAAATTAAC	TTTTGCAAAC	AATTCTAAAT
3841	ACAGGTGGTC	TTCAAGTAGT	AAAACCACAA	AAGGCAGTTT	TCTATCTATG	GTCATCTTTT
3901	CTCCCTTTAA	GTTAATTTTA	TATAAACAAG	ACTTCAAAAG	TAAATCACAT	TTTTTCAGGT
3961	GCAGACATCC	TTGTGGGTGG	GAAAGAATTT	AAACCTTTTT	TATATTTATT	AAAATGTTCT
		TTAAACATTG				
4081	GATGCGCATA	CAAGAGCTAA	GCAAAATAGA	AGAGCATCGA	CATAAGAAAA	GTTCAGGTAT
4141	CTAATATTCG	TCTTAATAGT	CTATTAACTT	GTGAAAGCTA	AGTTAATGGA	AATATTATTC
4201	CAAATCTATG	AGAACACTTG	GTGTATCAGG	GCAAAGCTTT	GTAAGATGTT	TTTGTAACTA
4261	AGACCAAAAT	TGAAGATAGA	GCTGCTTTAT	TTTCTTGGTT	TAAATCTTCC	TTTATTTTTG
4321	TAGTGATGAG	ATGCTGATTG	TGTACAGAAG	AATTTGAGAG	${\tt GGGATTTTTA}$	AAAACTGACT
4381	TAACACACCC	AGAAAGGCAG	CTAACAGCTA	TATATATATA	TAAATTTCAG	CCCAAACTCA
		CTCCAACTCT				
4501	CACTTAGTTT	CCAATTTTCC	CCTAGTCCAC	TAATTAAACT	TAGGTAATTA	TACTTCAGGT
4561	AGGGAAGTAC	AATATGTTTA	GTTTCAGGCT	GATGTGTGTT	ATAAAAAACA	ACACTGAAAA
4621	ATAAAAATGT	ACTTCCCTTC	TAAGGAGCAA	GCAGGTGATG	GTCATTCAAA	GAGATGTCAC
4681	ATTGAATTAT	GAGAGAAACA	ATTTAGAGGT	TTTTTTCCTG	GCTTCATGAA	TTGTTCTATA
		AGTCTAAGGA				
4801	TTTGAAAGTG	ATCACAGCAT	GAAAATGACT	GTGCTGCTTT	TTAGTGTCTG	GCTGCATAAT
		CAATTTGCTG				
4921	ATATCCTAAA	ATCTACTTCT	AATCAGCTTT	ATACTGTTGC	CTGTACAGCT	CAGTGAATGT
		TTAAGAGTTC				
5041	TAAAAACTCC	ACAGCGGGGA	TCTTTTTCTT	TGCTTTTGAA	ACCACCATTG	AATCACTATC
5101	GTTTTGCAGA	CTTTGCACAA	CTGTACAGGA	GAGTGGCCTT	TCTACAGCAC	ATTTTCAGTA
_		TAGTCAAAAT				
5221	GTCCAGTGTA	ATATTTTTAT	CATTTAAAAA	GAACTCTATT	TGTAAAAACA	TTTATTTACT
5281	GCATGGATAT	TGACGCACAT	TAAATTTGTG	${\tt GGATTTTGTA}$	TATGTAAAAA	AAAAAAAAA
5341	AAAAAAAAC	AAAAAACCTC	TTGTCCTAAA	ATGAAGTGTG	CTTGTTAACA	GGTGTTTAGA
		TTTACTAGAC				
5461	ATGTGTCATG	TTTACAGTGG	CCAGGTTGTG	GCCTGTAAAC	AGCAAGCAGT	TGACGGGAAG
		TTGCTACTAA				
5581	TGGTAAAAAT	TAAACTAATG	AATTTGACAA	GACTCGTGGC	TAGCCTAGCA	TGAAAGAGAC
		TATATAATAT				TAGGAGAGAG
5701	GCAGCACTGT	AAACTGAAGT	CAAATAAATT	CAGCTCTTAA	TGAATCCTT	

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Fig. 14: SEQ ID NO. 6: nucleotide sequence of human MAGUIN-2 cDNA

Length: 4350 bp

1	GTGCTCGGGG	CTTCACTCCC	GCGCGTGAGG	CGAGCGGGCA	AGTTGGCTGA
51	GGGCGTGCGG	CAGAGGCTGC	TTCCCTCGGC	GACGCGACCC	CTCAGCAACT
101	CAAGCTATGA	ACTGAAGCTC	CCTAGGGACG	GAGACCGGAG	CGGAGCGGCG
151		· ·	AGCAGCAGCA		CCGCCGCCGC
201	CGCCGCCTTA	GCGGGAACTG	AGCAGACCCG	GCGCGGAGCC	ACGACTCCTG
251	CACGTTTACC	TCCCTGTCGC	CGTTCCTGCC	GGCGGTTGGC	TAAAAGACGT
301	TACAGCCGCG	AGACCCGACA	CACAAAAGCC	GCTTTCTCCG	CGCCGCCCGC
351	CCAGGGAGGC	TGCGGCCAGC	AAGGGACCCC	ACCTGAGAGC	AGCTCGGGCT
401	GCTGAGTTCG	TTTTGTGTCT	GAGCTCTGCG	CTCTGCACGG	AACCGACCCC
451	GTACCCATGG	CTCTGATAAT	GGAACCGGTG	AGCAAATGGT	CTCCGAGTCA
501	AGTAGTGGAC	TGGATGAAAG	GTCTTGATGA	CTGTTTGCAG	CAGTATATTA
551	AGAACTTTGA	GAGGGAGAAG	ATCAGTGGGG	ACCAGCTGCT	GCGCATTACA
601	CATCAGGAGC	TAGAAGATCT	GGGGGTCAGC	CGCATTGGCC	ATCAGGAACT
651	GATCTTGGAA	GCAGTTGACC	TTCTGTGTGC	ATTGAATTAT	GGCTTGGAAA
701	CAGAAAATCT	AAAAACCCTT	TCTCACAAGT	TGAATGCATC	TGCCAAAAAT
751	CTGCAGAATT	TTATAACAGG	AAGGAGAAGG	AGTGGCCATT	ATGATGGGAG
801	GACCAGCCGA	AAATTGCCAA	ACGACTTTCT	GACCTCAGTT	GTGGATCTGA
851	TTGGAGCAGC	CAAGAGTCTG	CTTGCCTGGT	TGGACAGGTC	ACCATTTGCT
901	GCTGTGACAG	ACTATTCAGT	TACAAGAAAT	AATGTCATAC	AACTCTGCCT
951	GGAGTTAACA	ACAATTGTGC	AACAGGATTG	TACTGTATAT	GAAACAGAGA
1001	ATAAAATTCT	TCACGTGTGT	AAAACTCTTT	CTGGAGTCTG	TGACCACATC
1051	ATATCCCTGT	CGTCAGATCC	TCTGGTTTCA	CAGTCTGCTC	ACCTGGAAGT
1101	GATTCAGCTG	GCAAACATTA	AACCAAGCGA	AGGGCTGGGT	ATGTATATTA
1151	AATCTACATA	TGATGGCCTC	CATGTAATTA	CTGGAACCAC	AGAAAATTCA
1201	CCTGCAGATC	GGTGCAAGAA	AATCCATGCT	GGCGATGAAG	TGATTCAAGT
1251	TAATCATCAG	ACTGTGGTGG	GGTGGCAGTT	GAAAAATTTG	GTGAATGCAC
1301	TACGAGAGGA	CCCGAGTGGT	GTTATCTTAA	CTTTGAAAAA	GCGACCTCAG
1351	AGCATGCTTA	CCTCAGCACC	AGCTTTACTG	AAAAATATGA	GATGGAAGCC
1401	CCTTGCTCTG	CAGCCTCTTA	TACCTAGAAG	TCCCACAAGC	AGCGTTGCCA
1451			ACACCCACCA		TTCTGCCCTC
1501	CAGGATCTCT	ACATTCCCCC	TCCTCCTGCA	GAACCATATA	TTCCCAGGGA
1551	TGAAAAAGGA	AACCTTCCTT	GTGAAGACCT	CAGAGGACAT	ATGGTGGGCA
1601	AGCCAGTGCA	TAAGGGATCT	GAATCACCAA	ATTCATTTCT	GGATCAGGAA
1651	TATCGAAAGA	GATTTAATAT	TGTCGAAGAA	GATACTGTCT	TATATTGCTA
1701	TGAATATGAA	AAAGGAAGAT	CAAGTAGTCA	AGGAAGACGA	GAAAGCACCC
1751	CAACTTATGG	CAAGCTACGA	CCTATATCTA	TGCCAGTGGA	ATATAATTGG
1801	GTGGGGGACT	ATGAAGATCC	AAATAAGATG	AAGAGAGATA	GTAGAAGAGA
1851	AAACTCTCTA	CTTCGGTATA	TGAGCAATGA	AAAGATTGCT	CAAGAAGAAT
1901	ACATGTTTCA	GAGAAACAGC	AAAAAGGACA	CAGGGAAGAA	GTCAAAAAAG
1951	AAGGGTGATA	AGAGTAATAG	CCCAACTCAC	TATTCATTGC	TACCTAGTTT
2001	ACAAATGGAT	GCACTGAGAC	AAGACATCAT	GGGCACTCCT	GTGCCAGAGA
2051	CCACACTATA	CCATACATTT	CAGCAGTCCT	CACTGCAGCA	CAAATCAAAG
2101	AAGAAAAACA	AAGGTCCTAT	AGCAGGCAAG	AGCAAAAGAC	
2151		GGCCGTGGTG		CTGGCTTTGG	
2201				AAAAATATTG	
2251	AAGGATGCAT	CCCTTTATTG	GTATATTAAT	GAGGAGGATG	AAAAAGCAGA
		•			

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2351GCAAAAAATATGCATTCAAAGCCTGTCATCCTAAAATCAAAAGCTTTAT2401TTTGCTGCTGAACATCTTGATGATATGAACAGGTGGCTTAACAGAATTAA2451TATGCTGACTGCAGGATTATGCAGAAAGAGAGAGGATTAAGCAGGAACAAG2501ATTACTGGAGTOAGAGTGACAAGGAAGAGAACATACCACACCTCCCTC2501GATGAGTTCCGCCCACTCCACCCCCATATGATACATACCACCACACTCCCTC2601GATGAGTTCCGCCAGTCCTTATGTGGAAGCAGATGCCCCCAGCTCCTCT2601GATACTGGACTTCTCAGTCTCAGTCTTCTCCATGAGGAGTTCGCCAGGAA2701GTAACTGGGACCAGTGCAGTCTTCCCATTCGCAGGAGTTCGCCAGGAG2751CCGCTCCTGGCAGGATTTAATTGAGACGCCACTGACCAGCCCAGTCAGCG2801ACTATCTTCCCAGGACAGGGCAGTCTCCCCTGAGAAGGCCACCTGCAG2901CCACCTGCAGGATCACTATGGGCCATACCCCTTAGCTGAGAGTGAGAGGA2901CCACCTGCAGGATCACCTATGGGCCATACCCCTTAGCTGAGAGTGAGAGGA2901TGCAGATAGCGGGTTCAACCATTGCTGTCTCAATTCTGCCCTAACTCCAGAATTACTCTCACCATTCTGTGCAGC3101TGAGATAGCGGGTGAAGCGGGCTCGTCCTAGACCATTCTGTGCCAGCACTCAACCCATTGGATCACAAGAGAGGAGGAAACATAAGAAGACTCTCAACTCAACCCAAGATTGATAAACTAAAATAGAACTAAATAGAAGAGAGACTAACTAAAACAACTAAAACAACTAAAACAACTAAAACAACTATACACAACTATACACAACTATACACAACTAAAACAAACTAAAACAAAAACAACTACACAAAAA	2301	AGGATTCATT	AGCCTGCCTG	AATTTAAAAT	TGATAGAGCC	AGTGAATGCC
2451 TATGCTGACT GCAGGATATG CAGAAAGAGA GAGGATTAAG CAGGAACAAG 2551 AAACAAGATA GCCCTCCACC CCCATATGAT ACATACCCCA GACACCCCTC 2651 GATGAGTTGC GCCAGTCCTT ATGTGGAAGC AAAACATAGC CGACTTCCTC 2651 CCACGGAGAC TTCTCAGTCT CAGTCTTCC ATGAGACCA CGACTCCTC 2701 GTAACTGGGA GCAGTGCAGT GTCTCCCATT CGCAAGACAG CGACTTCCTC 2751 CCGCTCCTGC CAGGATTTAA TTGAGGGCC ACTGACAGC CCACTCAGCG 2751 CCGCTCCTGC CAGGATTTAA TTGAGGGCC ACTGACAGAC TCACCCCGC 2851 GCCATCTCC CAGAGACACAG GCGGCAGTCT ACCTGACAAGT TCAGGCTTAC 2801 ACTATCTTCA GACTCTGCC CTGGAGGATT ACCTGACAAGT TCAGGCTTAC 2851 GCCATCTCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGGAATG 2851 GCCATCTCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGGAATG 2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTTAGCTGAC 2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTTAGCTGAC AGTGAGAGG 3001 CGAGATAGCG GGTCAACCA TTGCTGTCT ATGCTGCA AGTGAGAGGA 3001 CGAGATAGC GGACACGACA TTGCTGTCT AAATGGAGGAA 3101 AGGAGGAGG GAAAGGGGAG GAGCAGAGGG AAAACATAGG AGAAAAAAGC 3101 AGGAGGAGG GAAAGGGGAG GAGCAGAGGG AAAACATAGG AGAAAAAAGC 3101 AGGAGGAGA GAAGGGGAG GAGCAGAGGG AAAACATAGG AGAAAAAAGC 3201 TTCTGTTGCA ACCTAACCCA TTGGACTCAC CCATGCCAAA TCGGATCAC 3201 TTCTGTTGCA ACCTAACCCA TTGGACTCAC CAGATTGATA GCTAAACTG 3251 AGACTTGTA AAAGCATAAG GCCCCCAGA GCCCAGACT ACAATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCCTCTCT TGCTGTTTAT AACAGAAAAC 3301 TCTTGCAAGC AACTAAAATG GCCCCCTCT TAGGACTCC AACATCAACC 3401 AAAGGGATT AAGAGGGGAG GGCCACTCTT AAGAAAAAC CGCCAGACT AAAATGAAAAC 351 AGACTTGTAA AAAGCCTAA TCAAACCAA TCAAGAAAAC 351 AGACTTGTAA AAAGCCTAC TCACCAA TCAAGAAGAAAAC 351 AGACTTGTAA AAAGCCTAA TCAAACCAA TCAAGAAGAAAAC GACACACAAAAAC 361 ACATTGGGAC TAGCATAAGA TCAAACCAA TCAAGAAGAAAAC GACACACAAAAACAAAAACCAA TAGAAAAAACAAAAAAAAAA	2351	GCAAAAAATA	TGCATTCAAA	GCCTGTCATC	CTAAAATCAA	AAGCTTTTAT
2451 TATGCTGACT GCAGGATATG CAGAAAGAGA GAGGATTAAG CAGGAACAAG 2551 AAACAAGATA GCCCTCCACC CCCATATGAT ACATACCCCA GACACCCCTC 2651 GATGAGTTGC GCCAGTCCTT ATGTGGAAGC AAAACATAGC CGACTTCCTC 2651 CCACGGAGAC TTCTCAGTCT CAGTCTTCC ATGAGACCA CGACTCCTC 2701 GTAACTGGGA GCAGTGCAGT GTCTCCCATT CGCAAGACAG CGACTTCCTC 2751 CCGCTCCTGC CAGGATTTAA TTGAGGGCC ACTGACAGC CCACTCAGCG 2751 CCGCTCCTGC CAGGATTTAA TTGAGGGCC ACTGACAGAC TCACCCCGC 2851 GCCATCTCC CAGAGACACAG GCGGCAGTCT ACCTGACAAGT TCAGGCTTAC 2801 ACTATCTTCA GACTCTGCC CTGGAGGATT ACCTGACAAGT TCAGGCTTAC 2851 GCCATCTCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGGAATG 2851 GCCATCTCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGGAATG 2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTTAGCTGAC 2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTTAGCTGAC AGTGAGAGG 3001 CGAGATAGCG GGTCAACCA TTGCTGTCT ATGCTGCA AGTGAGAGGA 3001 CGAGATAGC GGACACGACA TTGCTGTCT AAATGGAGGAA 3101 AGGAGGAGG GAAAGGGGAG GAGCAGAGGG AAAACATAGG AGAAAAAAGC 3101 AGGAGGAGG GAAAGGGGAG GAGCAGAGGG AAAACATAGG AGAAAAAAGC 3101 AGGAGGAGA GAAGGGGAG GAGCAGAGGG AAAACATAGG AGAAAAAAGC 3201 TTCTGTTGCA ACCTAACCCA TTGGACTCAC CCATGCCAAA TCGGATCAC 3201 TTCTGTTGCA ACCTAACCCA TTGGACTCAC CAGATTGATA GCTAAACTG 3251 AGACTTGTA AAAGCATAAG GCCCCCAGA GCCCAGACT ACAATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCCTCTCT TGCTGTTTAT AACAGAAAAC 3301 TCTTGCAAGC AACTAAAATG GCCCCCTCT TAGGACTCC AACATCAACC 3401 AAAGGGATT AAGAGGGGAG GGCCACTCTT AAGAAAAAC CGCCAGACT AAAATGAAAAC 351 AGACTTGTAA AAAGCCTAA TCAAACCAA TCAAGAAAAC 351 AGACTTGTAA AAAGCCTAC TCACCAA TCAAGAAGAAAAC 351 AGACTTGTAA AAAGCCTAA TCAAACCAA TCAAGAAGAAAAC GACACACAAAAAC 361 ACATTGGGAC TAGCATAAGA TCAAACCAA TCAAGAAGAAAAC GACACACAAAAACAAAAACCAA TAGAAAAAACAAAAAAAAAA						
ATTACTGGAG TGAGAGTGAC AAGGAAGAAG CAGATACTCC ATCAACACCA AAACAAGATA GCCCTCCACC CCCATATGAT ACATACCCAC GACCTCCCTC CCAGGAGAC TTCTCAGTCT ATGTGGAAGC AAAACATAGC CCACGGAGAC TTCTCAGTCT CAGTCTTC ATGAGAGAGAG CAGTCAGCG CCACGGAGAC TTCTCAGTCT CAGTCTTC ATGAGACACA CCACGGAGAC TTCTCAGTCT CAGTCTTC ATGAGACACA CCAGGCAGAC CCACGGAGAC TTCTCAGTCT CAGTCTTC ATGAGACACA CCAGTCAGCG CCGCTCCTGG CAGGATTAA TGAGACGCC ACTGACAAGT TCAGGCTTACC CCGCTCCTGG CAGGATTAA TGAGACGCC ACTGACAAGT TCAGGCTTACC CCGCTCCTCG CAGGACACAG GCGCCAGTCT ACCCTGCCAA CTCCAGAAATG CCACCTCCCC CAGAGCACAG GCGCCATCCC CTTAGCTAGA ACCCTCACCA CCACCTGCAG GATCACTATG GCCCATCTC ACCCTGCCAA CTCCAGAAATG CCACCTGCAG GATCACTATG GCCCATCCC CTTAGCTGAG ACTCAGAAATG CCACCTGCAG GATCACTATG GCCCATCCC CTTAGCTGAG ACTCAGAAATG CCACCTGCAG GATCACCAA TTGCTGTCT AATGCTCCAG GATCACCA TTGCAGAAATG CCAGAGTAGCG GGTTCAACCA TTGCTGTCT AATGCTCCAG GATGACGAG GATGACGTG AACCCCCCAGA GGTGGAGGAA GAGGAGGAGG CCACCTCCCC CAGAGAGTTG TAGAACCTCT CCATGCCAAA GAGGAGGAGG CCACCTCCCC CAGAGAGTTG TAGAACCTCT CCATGCCAAA GAGAAAAAACC CCAGGAAATACC CACCCAA TTGGACCCC AGACTACACCA TCCGAAGATTAA ACCACCAA TCCGCATCACCA TTCCTGCTC TAGACCCAA TCCGAACCACA TCCGCAACCCA TCCGCCAAACCA TCCGCCAAACCAC ACATCAACCA TTGGACTCAC AGATTGATAA GCTAAACCC CCACCTGCCAA ACCACCAA TCCACCAA TCCAGCCAAACCACA TCCAGCCAAACCACA TCCAGCCAAACCACACACAACCAA TCCAGCCAAACCACA TCCAGCCAAACCACAACCAACACAACA	2401	TTTGCTGCTG	AACATCTTGA	TGATATGAAC	AGGTGGCTTA	ACAGAATTAA
2551 AAACAAGATA GCCCTCCACC CCCATATGAT ACATACCCAC GACCTCCTC 2601 GATGAGTTGC GCCAGTCCTT ATGTGGAAGC AAAACATAGC CGACTTTCCT 2651 CCACGGAGAC TTCTCAGTCT CAGTCTTCTC ATGAGGAGT TCGCCAGGAA 2701 GTAACTGGGA GCAGTGCAGT GTCTCCCATT CGCAAGACAG CCAGTCAGCG 2751 CCGCTCCTGG CAGGATTAA TTGAGACGCC ACTGACAAGT TCAGGCTTAC 2801 ACTATCTTCA GACTCTGCCC CTGGAGGATT CTGTCTTCTC TGACTCAGCG 2851 GCCATCTCCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGAACAG 2801 CCACCTGCAG GATCACTATG GGCCATACCC CTTAGCTGAG ACCCTGCAGA AGTGAGAGGA 2901 CCACCTGCAG GATCACTATG GGCCATACCC CTTAGCTGAG AGTGAGAGGA 2951 TGCAAGTGCT AAATGGAAAT GGGGCAATCC CTTAGCTGAG AGTGAGAGGA 2951 TGCAAGTGCT AAATGGAAAT GGGGCAATCC CTTAGCTCAG AGTGAGAGGA 3051 TGACCCACAG GATGACGAG ACCCCCAGA GTGGAGGAGG 3051 TAATACACTG CGAGAGTTGG TAGAACCATTTGGTGTCTG AATGCTCCAG GAGGAGGAGG 3101 AGGAGGAGGA GGAAGGGGAG GCAGCCCCAGA GTGGAGGAA TCGGATCACC 3201 TTCTTGTTGC ACTCAAACCA TTGGACCTCC CCATGCCAAA TCGGATCAC 3201 TCTTGTTGC ACTCAAACCA TTGGACTCAC AGATTGATAA GCTAAATGTT 3251 AGACATTAT AAACCCAA TTGGACTCAC AGATTGATAA GCTAAACTCA 3301 TCTTGCAAGC AACTAAAATG GCCCCAGAG GGCCACACTT AACAACAACC 3301 TCTTGCAAGC AACTAAAATG GCCCCCAGA GCCACACTT AACAACAACA 3351 AGACTTGTAA AAAGCTTAGA TCAACACAA TCAAGAAAC 3351 AGACTTGAAA AAAGCTAAAATG GCCACTCTT AACATCAACC 3401 AAAGAGAGG TAGCATTAGA TCAACACAA TCAAGAAACA 3551 AGACTTGAAA AAAGCGAA TCAACACAA TCAAGAAAC 3551 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GCCCCTCC 3601 AAAAGAGAGG GATCACTTTA AACACCAA TCAAGATGAA CCACACACAA AAAACATAATG 3601 AAAAGAGAGG GATCACTTTAA AAACCTCAAGT TCAAGATGAA GCACACATAACTAA 3501 AGAAAACTGC GGTTTCTTTA AACACCAA TCAAGATGA GCACACATAAC 3601 AAAAGAAGG GATCACCTTA AACACCAA TCAAGATGA AATTCTTCT TGACACCAGG 3601 AAAAGAAGG GATCACTTTAA AACCTCAGT TCTTTTCTC TGACCACAGG 3601 AAAAGAAGA GACCTCATTA ATAAAGGCAA AATTCTTCTC TGACCACAGG 3601 AAAAGAAGA GACCTCATTTA AACCTAGAT TCTTTTTCT TAACTAATTA 3701 AAGTGTATTT TGCATTTTTA AAACTTGAC TCTTTTTCT TAACTAATTA 3701 AGGTTAAAA TCCTAACTTT CTCCTTATTT TAACAACCT TTTTTTTT	2451	TATGCTGACT	GCAGGATATG	CAGAAAGAGA	GAGGATTAAG	CAGGAACAAG
2601 GATGAGTTGC GCCAGTCCTT ATGTGGAAGC AAAACATAGC CGACTTTCCT 2651 CCACGGAGAC TTCTCAGTCT CAGTCTTC ATGTGGAGGAT 2701 GTAACTGGGA GCAGTGCAGT GTCTCCCATT CGCAAGACAG CCAGTCAGCG 2751 CCGCTCCTGG CAGGATTAAA TTGAGACGCC ACTGACAAGT TCAGGCTTAC 2801 ACTATCTTCA GACTCTGCCC CTGGAGGATT CTGTCTTCTC TGACTCCGCG 2851 GCCATCTCCC CAGAGCACAG GCGCAGTCTT ACCCTGCCAA ACTGAGAAGG 2901 CCACCTGCAG GATCACTATG GGCCATACC CTTAGCTCAA ACTGAGAAGGA 2951 TGCAAGTGCT AAATGGAAAAT GGGGGCATACC CTTAGCTCAA ACTGAGAAGGA 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTG AATGCTCCAG TTAGTGCCT 3051 TGACACACG GATCACCACA TTGCTGTCTG AATGCTCCAG TTAGTGCCTG 3051 TGACACACG GATGACCTAC ACCCCCAGA GGTGAGAGA AGGAGAGGAG	2501	ATTACTGGAG	TGAGAGTGAC	AAGGAAGAAG	CAGATACTCC	ATCAACACCA
2651 CCACGGAGAC TTCTCAGTCT CAGTCTTCTC ATGAGGAGTT TCGCCAGGAA 2701 GTAACTGGGA GCAGTGCAGT GTCTCCCATT CGCAAGACAG CCAGTCAGCG 2751 CCGCTCCTGG CAGGATTTAA TTGAGACGCC ACTGACAAGT TCAGGCTTAC 2801 ACTATCTTCA GACTCTGCCC CTGGAGGATT CTGTCTTCTC TGACTCCGCG 2851 GCCATCTCCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGAAATG 2901 CCACCTGCAG GATCACTATG GGCCATACCC CTTAGCTGAG ACTGACAAGT 3001 CGAGATAGCG GATCACCAA TTGCTGTCTC ACCCTGCCAA CTCAGAAATG 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTT AATGCTCTGCT 3001 TGACCCACAG GATGACGTGC ACCCCCCAGA GTTCAGGGGA 3101 AGGAGGAGGA GGAAGGGGAG GCAGCAGGAG CTCAGAAGTTT TACTCTGCCT 3051 TGACCCACAG GATGACGTGC AACCCCCCAGA GGTGGAGGAA GAGGAGGAG 3101 AGGAGGAGGA GGAAGGGGAG GCAGCAGGGG AAAACATAGG AGGAGAGAG 3101 TATATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCAC 3201 TTCTGTTGCC ACTCAACCCA TTGGACTCAC CAGATTGATAA GCTAAAGTCA 3251 AGAGAATTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTA GCGAGAACTC 3401 AAAGGGATAT AGAGAGGGGA GGCCACTCTT AAGAAGAAAC 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCA 3401 AAAGGGATAT AGAGAGGGGA GGCACTCTT AAGAAGAAGC GACAGTAAC 3551 AGAAAACTGC GGTTTCTGTG GGAGAACCAA TCAAGAGG GTCTTAACTG 3551 AGAAAACTGC GGTTTCTGTG GGAGAACCAA TCAAGAGG GTCTTAACTG 3551 AGAAAACTGC GGTTTCTGTG GGAGAACCAA TCAAGAGG GTCTTAACTG 3551 AGAAAACTGC GGTTTCTGTG GGAGAACCAA TCAAGAAGG GTCTTAACTG 3551 ACTCTTTGGT GCCCTCTTTA AGGCAAGA AAATTCTGC TGACACCAGG 3651 ACTCTTTGGT GCCCTCTTTA AGGCAACA TCAAGAAGCAA TTAATGTAAT 3751 AGTGTAATCT ATTAAGAGCAA GAGCAACACAA GAAGCAA TATAATGTAT 3751 AGTGTAATCT ATTAAGAGCAA GTATACCACA TCAAGATTG TACTAAATTA 3751 AGGTGTAATCT ATTAAGAGCAA TCCTAACTTT TCCTTTTTCT TACTAAGTTT TCATGTTTTC TATATAGAGT TCCTTATTTT AAAACTTACTA TTATAGAATTA 3751 AGGTGTAATCT ATTAAGAGAA TCCTAACTTT TCCTTTTCTT TCTTTTCTT TCTTTTCTG TAAAATTTT 3761 TCAGCTAAAA TCCTAACTTT TCTCTTTTTT TCTTTTCTT TAAAAATATTT 4001 TGAATCTATA GGCTGGGT TTCTTTTTT TCTTTTCTT TAAAATATTT 4001 TGAATCTATA GGCTGGGT TTCTTTTTTT TCTTTTCTT TAAAAATATTT 4001 TGAATCTAA TCATAACTTT TCTCTTTTTTT TAAAAGTATT TTTTTTTTTT	2551	AAACAAGATA	GCCCTCCACC	CCCATATGAT	ACATACCCAC	GACCTCCCTC
2701 GTAACTGGGA GCAGTGCAGT GTCTCCCATT CGCAAGACAG CCAGTCAGCG 2751 CCGCTCCTGG CAGGATTTAA TTGAGACGCC ACTGACAAGT TCAGGCTTAC 2801 ACTATCTTCA GACTCTGCCC CTGAGGATT CTGTCTTCTC TGACTCCGCG 2851 GCCATCTCCC CAGAGCACAG GCGCAGTCT ACCCTGCCAA CTCAGAAATG 2901 CCACCTGCAG GATCACATATG GGCCATACCC CTTAGCTGAG AGTGAGAGGA 2951 TGCAAGTGCT AAATGGAAAT GGGGCAAGCC CTCGAAGTT TACTCTGCCT 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTTG AATGCTCAG AGTGAGAGGA 3051 TGACCCACAG GATGACGTGC AACCCCCAGA GGTGGAGGAA GAGGGAGGGG 3101 AGGAGGAGG GAAGGGGAG GCAGCAGGGG AAAACATAAGG AGAAAAAAAGC 3151 TAATACACTG CGAGAGTTGG TAGAACCCT CCATGCCAA TCGGATCAC 3201 TTCTGTTGGC ACTCAACCA TTGGACTCAC AGATTGATAAAAAGC 3151 AGAAATTTA GATCGGAGAG AGTCGGTCCA GGTGGAGGAA GAGAGAGGGGG 3101 AGAGAGTAAAAATG GCTCGTCCT TGCTTTAT AACAGCAC 3201 TCTTGCAAGC AACTAAAATG GCTCGTCCT TGCTGTTAT AACAGCAC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTAT AACAGAAAAA 3351 AGACTTGTAA AAAGCTTAGA TCAACACC TGCGGTCTT TGAGACTC AGATTATA AACAGGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCAACACCA TCAAGAGAAAC 3351 AGACTTGTAA AAAGCTTAGA TCAAAGACCA TCAAGAGAAGA GGGGCATCC AACATCAACC 3401 AAAGGGATAT AGAGAGGGCA GGCCACTCTT AAGAAGAAG GGCTTCTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGACCAA TCAAGATGG GGGCCTCCC 3401 AAAAGGGACT CTGTGTGGTA ACACCCAGG TGTTTAACTG 3551 GGAAAAGGGC CTGTCTGTGGGTA ACACCCAGGA TCAAGAAGA GGGGAAAGG GTCTTAACTG 3551 AGACTTTTT TGCATTTTA AAACCTCAGT TGTTTTCCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA ACACTCACGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGC TGCTGTTTTC 3701 AAGTGTAATT TGCATTTTTA AAACTTAGA AAATTCTGC TGCTGTTTTC 3701 AAGTGTAATT TGCATTTTTA AAACTTAGAC ATTTTTCTCC TGACACCAGG 3651 ACTCTTTGGT GGC ACTCTTTA AAACTTAGA TGCTGTTTTT TGCATTTTT TGCATTTTT AAAACTTACAA TTTTTTTTT TTTTTTTTT TTTTTTTT	2601	GATGAGTTGC	GCCAGTCCTT	ATGTGGAAGC	AAAACATAGC	CGACTTTCCT
2751 CCGCTCCTGG CAGGATTTAA TTGAGACGCC ACTGACAAGT TCAGGCTTAC 2801 ACTATCTTCA GACTCTGCCC CTGGAGGATT CTGTCTTCTC TGACTCCGCG 2851 GCCATCTCCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGAAATG 2901 CCACCTGCAG GATCACTATG GGCCATACCC CTTAGCTGAG AGTGAGAGGA 2951 TGCAAGTGCT AAATGGAAAAT GGGGGCAGCC CTTAGCTGAG AGTGAGAGGA 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCT AATGCTAGCTGAG 3051 TGACCCACAG GATGACCTAC ACCCCCAGA GGTGGAGGAA GAGAGAGGGG 3101 AGGAGGAGGA GGAAGGGGGA GCAGCAGGGG AAAACATAGG AGAAAAAGC 3151 TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC 3201 TTCTGTTGGC ACTCAACCCA TTGGACTCAC CAGACTCTACACAAAACGC 3201 TCTTGTAGCA ACTCAACCCA TTGGACTCAC AGATTGATAA GCTAATGGTT 3251 AGAGAATTTA GATCGGAGAG AGTCGACCCA AGATTGATAA GCTAAAAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGAA GGCACCTCTT TGCTGTTTAT AACAGAAAAAC 3451 ACATTGGGAC TAGCATAAAAT TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAAGGAAC CGGCACCTCTT AAGAAGAATG CGAGCTTTCT 3451 ACATTGGGAC TAGCATAAAA TCAAAAGCCAA TCAAAGATGA GCACAGTAAC 3551 AGAAAACTGC GGTTTCTGTG GGAGAACCAA TCAAAGATGA GCACAGTAAC 3551 AGAAAACTGC GGTTTCTGTG GGAGAACCAA TCAAAGAGAAG GCACAGTAAC 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAACA TCAAAGACAA AAATTCTGC TGTTTAACTG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA AAATTCTGC TGTTTAACTG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA AAATTCTGGC TGTTTAACTG 3701 AAAGGGAG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAACTG 3701 AAGTGTAATCT ATTAAAGGCAA GGGAAAGCAA ATTATGTATT 3701 AAGTGTAATCT ATTAAAAGT GTATTCAGGC TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAAGT GTATTCAGGC TGCTGTATTT TACTAAATTA 3751 AGTGTAATCT ATTAAAAGT TCTTCATGC CAGGCTTTTAT TACAAAATTA 3751 AGTGTAATCT ATTAAAAGT TCTTCATGC CAGGCTTTTAT TACAAAATTT 4001 TGAATCTATA GGCTAGATTA TCTCTTTTTC TATAAAATTTT 4001 TGAATCTATA GGCTAGAATATTC CTCCTTTATTT TTTTCTT TATAAAATTTT 4001 TGAATCTATA GGCTGGGT TTCATTTTTT AAAAATATTT 4001 TGAATCTATA GGCTGCGAT TTCATTTTTTC TTTGGACCCC 4101 TATTGCATAC TGGGTAAAAA CCACTGTAATA TTCTTTTCTT	2651	CCACGGAGAC	TTCTCAGTCT	CAGTCTTCTC	ATGAGGAGTT	TCGCCAGGAA
2801 ACTATCTTCA GACTCTGCCC CTGGAGGATT CTGTCTTCTC TGACTCCGCG 2851 GCCATCTCCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGAAATG 2901 CCACCTGCAG GATCACTATG GGCCATACCC CTTAGCTGAG AGTGAGGGA 2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTCGAAGTTT TACTCTGCCT 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTG AATGCTCAG TACTCTGCCT 3051 TGACCCACAG GATGACGTC AACCCCCAGA GGTGGAGGAA GAGAGAGAGGGAG 3101 AGGAGGAGGA GGAAGGGGAG GCAGCAGGGG AAACATAGG AGAAAAAAGC 3151 TAATACACTG CGAGGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC 3201 TTCTGTTGGC ACTCAACCCA TTGGACTCAC CAATGCAAAA CTCGAACTCAC 3301 TCTTGCAAGC ACTCAACCCA TTGGACTCAC GGCAAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTA GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGAG GGCCACTCT TAGAAGCACA CGAGCTTCTC 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGAGGG GCACCTTCC 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGAG GCCACCTTCT 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTC TGACACCAG 3601 AAAAGAAACTG GGTTTCTTGTG GGAGAACAGA AGGGGAAAGG GCCACCTTCT 361 ACTCTTTGGT GGCCTCTTTA AGGCAAAGC AATAACTAGA AAATTCTGC TGTTTAACTG 361 ACTCTTTGGT GGCCTCTTTA AGGCAAAGC AATAACTAGA AAATTCTGC TGTTTAACTG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA ATTTGTTTTT TACATGTATT 3751 AGTGTAATCT ATTAAGGCAA GGTATCACA ATTTTCTTTT TACTTATTT TACATATATT 3751 AGTGTAATCT ATTAAGGCAA GGTATCACA ATTTTCTTTT TACTAAATTA 3751 AGTGTAATCT ATTAAAGGT GCATTTCACC TGCTGTATTT TACTAAATTA 3751 AGTGTAATCT ATTAAAGGCAA GCATACACAA ACACCACAGA GACTGCTTTC 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCACACACAG GACTGCTTTC 3801 TCAGCTAAAA TCCTAACTTT CTCCTTATTT TTTTTCTT TATAAAATTT 4001 TGAATCTATA GGCTGCGGT TTCCTTTTTTTTTTTTTT	2701	GTAACTGGGA	GCAGTGCAGT	GTCTCCCATT	CGCAAGACAG	CCAGTCAGCG
2851 GCCATCTCCC CAGAGCACAG GCGGCAGTCT ACCCTGCCAA CTCAGAAATG 2901 CCACCTGCAG GATCACTATG GGCCATACCC CTTAGCTGAG AGTGAGAGGA 2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTCGAAGTTT TACTCTGCCT 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTG AATGCTCCAG TTAGTGCCTG 3051 TGACCACAG GATGACGTGC AACCCCCAGA GGTGGAGGAA GAGGAGGAGG 3101 AGGAGGAGGA GGAAGGGGAG GCAGCAGGGG AAAACATAGG AGAAAAAAGC 3151 TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC 3201 TTCTGTTGGC ACCCAACCCA TTGGACTCAC AGATTGATAA 3251 AGAGAATTTA GATCGGAGAA AGTCGGTACCA GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTTGAATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG GGGGCCTCCC 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGAAC 3551 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3601 AAAAGAGGCT CTGTGTGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGC TGACACCAGG 3601 AAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGC TGACACCAGG 3601 AAAGAGAAG GGCCTCTTTA AGGCAAAGCA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTAGA TATTTTCTC TGACACCAGG 3601 ACCCTTTGGT GGCCTCTTTA AGGCAAAGCA ATTTTCTTCT TGACACCAGG 3601 TCTTGCAACC ATTAAAAGT TTTCTCAGGT GCAACACAGA ACCTTAATTA 3701 AGTGTAATCT ATTATAAAGT GTATTCAGGT GCAACACAGA ACCTTAATTA 3701 AGGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TACTGAATCTA 3801 TGTTTATTCT ATTATAAAGT TTTCTCATGC CAGGCTTTAT TATAGAATCT 4001 TGAATCTATA GGCTGGGT TCCTTTATTT CTTCTGGCACTT GTATACTG 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 4001 TGAATCTATA GGCTAGATT CTCCTTTATTT TATAGAATCT 4001 TGAATCTATA GGCTAGATTA TTCTCTTTTT TAACACTTT TTTTTCTT TAAAAATTT 4001 TGAATCTATA GGCTAGATTA TTCTCTTTTTT TTTTTCTT TAAAAATTT 4001 TGAATCTATA GGCTAGATTA TTCTCTTTTTTTTTTTT	2751	CCGCTCCTGG	CAGGATTTAA	TTGAGACGCC	ACTGACAAGT	TCAGGCTTAC
2901 CCACCTGCAG GATCACTATG GGCCATACCC CTTAGCTGAG AGTGAGAGGA 2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTCGAAGTTT TACTCTGCCT 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTG AATGCCCAGA 3051 TGACCCACAG GATGACGTGC AACCCCCCAGA GGTGGAGAGA GAGGAGGAGG 3101 AGGAGGAGGA GGAAGGGGAG GCAGCAGGGG AAAACATAGG AGAAAAAAGC 3151 TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC 3201 TTCTGTTGGC ACTCAACCCA TTGGACTAC AGATTGATAA GCTAATGTTT 3251 AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTCCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGAGAGA GGACCAGTAAC 3551 AGAAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GCCACTCTT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGA GCACAGTAAC 3551 AGAAAGGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTTCC TGACACCAGG 3601 AAAAGAGGGC CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGGGG GATCAGCTTC AATAACTAGA AAATTCTGCC TGTTTAACTG 3751 AGGTGAATTT TGCATTTTTA AAACTTGAC TGTGTTTATT TACAAATTA 3701 AAGTGTAATTT TGCATTTTA AAACTTGAC TGCTGTATTT TACTAAATTA 3701 AAGTGTAATTT TGCATTTTTA AAACTTGACA ATTTCTGCT TACAATTA 3801 TGTTTATTCT ATTTAAAAGT GTATTCAAGA ATTTCTTTT TACAAATTA 3801 TGTTTATTCT ATTTAAAAGT GTATTCAAGC CAGGCTTTAT TATAAATTA 3751 AGTGTAATTT ATTAAAAGT GTATTCAAGA TTCTTTTCT TACAAATTA 3801 TGTTTATTCT ATTAAAAGT GTATTCAAGC TGCTGTTTT TATAAAATT 4001 TGAATCTAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT TAAAAATTA 4001 TGAATCTAAA TCCTAACTTT CTCCTTATTT TAAAAATTTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TTTTTTTTCT TAAAAATATTT 4001 TGAATCTAAA TCCTAACTTT CTCCTTATTT TAAAAATATTT 4001 TGAATCTAAA TCCTAACTTT TTCTTTTTCT TAAAAAATATTT 4001 TGAATCTAAA TCCTAACTTT TTCATTTTTTCT TAAAAAATATTT 4001 TGAATCTAAA TCCTAACTTT TTCATTTTTTCT TTTTTCTG TAAAAAATATTT 4001 TATGGCTCAA TCAAATATTGC TTATTTTTCT TCTGTATGG ATGTGAATATA 4001 TATGGCTCAA TCAAATATTGC TTATTTTTCT TCTGTATGG ATGTGAAATT 4001 TATGGCTCAA TCAAATATTGC TTATTTTTCT TCTGTATGG ATGTGAAATT 401 TATGGCTCAA TCAAATATTGC TTATTTTTCT TCTGTATGG ATGTGAAATT 401 TAT	2801	ACTATCTTCA	GACTCTGCCC	CTGGAGGATT	CTGTCTTCTC	TGACTCCGCG
2951 TGCAAGTGCT AAATGGAAAT GGGGGCAAGC CTCGAAGTTT TACTCTGCCT 3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTG AATGCTCAG TTAGTGCCTG 3051 TGACCCACAG GATGACGTGC AACCCCCAGA GGTGGAGGAA GAGGAGGAGG 3101 AGGAGGAGGA GGAAGGGGAG GCAGCAGGGG AAAACAATAGG AGAAAAAAGC 3151 TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC 3201 TTCTGTTGGC ACTCAACCCA TTGGACTCAC AGATTGATAA GCTAATGTTT 3251 AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTCCC 3401 AAAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAAAC 3551 AGAAACATCA GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGGA GCACAGTAAC 3551 AGAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAACTG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTA AAACCTAGA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTA AAACTTGAG GAGAAAGCAA ATTATGTATT 3751 AGTGTAACTC ATTAAAGGCAA GGTATACACA ATTGCTTTTG TACTAAATTA 3801 TGTTTATTCT ATTAAAAGT GTATTCAGGT GCAACACAGA GACTTCTTC 3851 GGTGACATTA ATGAAGAAAA TTCTCAGGT GCAACACAGA GACTTCTTC 3851 GGTGACATTA ATGAAGAAAA TTCTCAGGT GCAACACCAGA GACTTCTTC 4001 TGAATCTATA GGCTGAGGT TTCCTTATTT CTTGTGTTTT TACTAAATTT 4001 TGAATCTATA GGCTGGGT TTCATTTTT AAAAGTTATT TTCTCTTTCT TTTTCTTTCTT TTTTCTTGTTT TTTTTCTTTTTTTT	2851	GCCATCTCCC	CAGAGCACAG	GCGGCAGTCT	ACCCTGCCAA	CTCAGAAATG
3001 CGAGATAGCG GGTTCAACCA TTGCTGTCTG AATGCTCCAG TTAGTGCCTG 3051 TGACCCACAG GATGACGTGC AACCCCCAGA GGTGGAGGAA GAGGAGGAGG 3101 AGGAGGAGGA GGAAGGGGAG GCAGCAGGGG AAAACATAGG AGAAAAAAGC 3151 TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC 3201 TTCTGTTGGC ACTCAACCCA TTGGACTCAC AGATTGATAA GCTAATGTTT 3251 AGAGAATTTA GATCGGAGGA AGTCGGTACG GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGATG CGAGCTTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGG GCACAGTAAC 3501 AGAAAACTGC GGTTTCTGTG GGAGAACAA ACGAAAAC 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGGGG CTCTCTTA AGGCAAAGCA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAGCAA ATTATGTATT 3701 AAGTGTAATTT TGCATTTTTA AAACTTGAC TGCTGTATTG TACTAATTA 3751 AGTGTAATCT ATTAAGGCAA GGTATACACA ATTTTCCTTT TACTAATTA 3751 AGTGTAATCT ATTAAGGCAA GGTATACACA ATTTTCCTTT TACTAATTA 3751 AGTGTAATCT ATTAAGGCAA GGTATACACA ATTTTCCTTTG AAACTTACTA 3801 TGTTTATTCT ATTAAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTTCTCATGC CAGGCTTTTTT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT TAAAATTA 4001 TGAATCTATA GGCTTGGGT TTCATTTTT AAAAGTTAT TATAGAATCT 4001 TGAATCTATA GGCTTGGGT TTCATTTTTA AAAAGTTATT TTTTTTCTT CTTTTGCATTT CTCTTTTTTT TTTTTTTTT TTTTTTTTTT	2901	CCACCTGCAG	GATCACTATG	GGCCATACCC	CTTAGCTGAG	AGTGAGAGGA
TGACCCACAG GATGACGTGC AACCCCCAGA GGTGGAGGAA GAGGAGGAGG TGACCCACAG GAAGGGGAG GCAGCAGGGG AAAACATAGG AGAAAAAAGC TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC ACTCAACCCA TTGGACTCAC AGATTGATAA GCTAATGTT AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC ACTCAAACG ACTCAACCCA TTGGACTCA TGCTGTTATA AACAGAAAC TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTATA AACAGAAACAC AAAGCTTGTAA AAAGCTTAGA TCAACAGGG TTTTTGGATTG GGGGCCTCCC ACTCAACAG ACCTAAAATG TCAACAGG TTTTTGGATTG GGGGCCTCCC ACTCAACAG ACCTAAAATG TCAACAGGG TTTTTGGATTG GGGGCCTCCC AACATCAACC AACATCAACC AACACCAAGG TCAACAAGG TCAACAGGG TTTTTGGATTG GGGGCCTCCC AACATCAACCAG GGCCACTCTT AAGAAGAAAG GCACAGTAAC AAAAGAGAAGC TAGCATAAGA TCAAAGCCAA TCAAGATGGA GCACAGTAAC AAAAGAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGC TGTTTAACTG AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGC TGTTTAATTG AAGTGTATTT TGCATTTTTA AGACAAAGCA ATTTTTTTTATATTTTTTTTTT	2951	TGCAAGTGCT	AAATGGAAAT	GGGGGCAAGC	CTCGAAGTTT	TACTCTGCCT
3101 AGGAGGAGA GGAAGGGGAG GCAGCAGGG AAAACATAGG AGAAAAAAGC 3151 TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC 3201 TTCTGTTGGC ACTCAACCCA TTGGACTCAC AGATTGATAA GCTAATGTTT 3251 AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGAAAGG GCACAGTAAC 3551 GGAAAACTG GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAAGT GTATTCAGGT GCAACACAGA GACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTCT TAAAATTA 3751 AGTGTAATCT ATTAAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGCACTT GTATACCAGT 4001 TGAATCTATA GGCTGTGGGT TTCCTTTTTT TAAAAGTT TAAAAATATT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTT TTTTTTCTT TAAAAATATT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTT TTTTTTTTTT	3001	CGAGATAGCG	GGTTCAACCA	TTGCTGTCTG	Aatgctccag	TTAGTGCCTG
TAATACACTG CGAGAGTTGG TAGAACCTCT CCATGCCAAA TCGGATCCAC TCGATCCAC AGATTGATAA GCTAATGTTT AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC AGATTGATAA GCTAATGTTT AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC AGATTGTAA AACACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC AAGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC AGAAAACTAAGAG TCAAAGAGA TCAAAGAGAATG CGAGCTTCTT AAGAGAAACTG GGTTTCTGTG GGAGAACAA TCAAGATGAG GCACAGTAAC GAAAACTGC GGTTTCTGTG GGAGAACAA AGGGGAAAGG GTCTTAACTG GAAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA AAATTCTGGC TGTTTAATGG ACTCTTTGGT GGCCTCTTTA AAACTTGACG TGCTGTATTG TACTAAATTA TGATTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA AGTGTAATCT ATTAAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA GGTGAACATA ATGAAGAAAA TTTCTCATGC CAGGCTTTTC GGTGTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAGT GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT GGTGTAAACT ATGAAGAAAA TTTCTCATGC CAGGCTTTTT GGTGTAAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT TCAGCTAAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT TCAGCTAAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT CTTTCCAAAC TAGCTTCAGA TATTATTTAA TACTATTTT TGTCTGGATG TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC TATGGGCTCAA TAATATTGC TTATTTTTAA TACTATGTAA TTCTTTTCTG TAAAAATATTT TTTTTCTAACC TGGGTCCCC TTATTTTTCT TCTGTAGTGG ATGTGAAATT TTCTTTTCTAGTC GGATAAAATT TCTCTTTTCT TCTGTAGTGG ATGTGAAATT TTTTTTCTT CCTGTCACCG CAGGATAAATT TAACACTGTA TTTTTGAAATGA TTTTTTTTCTT CCTGTCACCG CAGGATAAATT TAACACTGTA TTTTTGAAATGA TTTTTTTTTCTT CCTGTCACCG CAGGATAAATT TAACACTGTA TTTTTGAAATGA TTTTTTTTTCTT CCTGTCACCG CAGGATAAATT TAACACTGTA TTTTTGAAATGA TTTTTTTTTTTTT CCTGTCACCG CAGGATGATAAT TTAACACTGTA TTTTTTTTTAATGC TAATTAATGA TTTTTTTTTTTTTTTTTTTTTTTTTTTT	3051	TGACCCACAG	GATGACGTGC	AACCCCCAGA	GGTGGAGGAA	GAGGAGGAGG
3201 TTCTGTTGGC ACTCAACCCA TTGGACTCAC AGATTGATAA GCTAATGTTT 3251 AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGAA GCACAGTAAC 3501 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA AATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAAGT GTATTCAGCA TGCTGTATTG AAACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGCA CAGGCCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTGTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAAATATT 4001 TGAATCTAATA GGCTGTGGGT TTCATTTTTC TTTTTCTG TAAAAATATTT 4001 TGAATCTAATA GGCTGTGGGT TTCATTTTTC AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAGAAA CACGATAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGAATATT TAACACCTGTA TTTTGAAATGA 4251 TTTTTTTCTT CCTGTCACCG CAGGTGTGTGG TATTGCATAA TGTGAAATAC	3101	AGGAGGAGGA	GGAAGGGGAG	GCAGCAGGGG	AAAACATAGG	AGAAAAAAGC
3251 AGAGAATTTA GATCGGAGAG AGTCGGTACG GCGCAGACTC AACATCAACC 3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGGA GCACAGTAAC 3501 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTT	3151	TAATACACTG	CGAGAGTTGG	TAGAACCTCT		
3301 TCTTGCAAGC AACTAAAATG GCCTCGTCCT TGCTGTTAT AACAGAAAAC 3351 AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGGA GCACAGTAAC 3501 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGT TTCATTTTT AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATGA 4251 TTTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	3201	TTCTGTTGGC	ACTCAACCCA	TTGGACTCAC	AGATTGATAA	GCTAATGTTT
AGACTTGTAA AAAGCTTAGA TCATCAAGTG TTTTTGGATTG GGGGCCTCCC 3401 AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGGA GCACAGTAAC 3501 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAGGCA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGT TTCATTTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTTGAAATG 4251 TTTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	3251	AGAGAATTTA	GATCGGAGAG	AGTCGGTACG	GCGCAGACTC	AACATCAACC
AAAGGGATAT AAGAGGGGCA GGCCACTCTT AAGAAGAATG CGAGCTTTCT 3451 ACATTGGGAC TAGCATAAGA TCAAAAGCCAA TCAAGATGGA GCACAGTAAC 3501 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTCT AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTTGAAATGA 4251 TTTTTTTCTT CCTGTCACCG CAGGTGTGGG TATTGCATAA TGTGAATACC	3301	TCTTGCAAGC	AACTAAAATG	GCCTCGTCCT	TGCTGTTTAT	AACAGAAAAC
ACATTGGGAC TAGCATAAGA TCAAAGCCAA TCAAGATGGA GCACAGTAAC 3501 AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG 3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAGCAA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTCT TAAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTA AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG	3351	AGACTTGTAA	AAAGCTTAGA	TCATCAAGTG	TTTTGGATTG	GGGGCCTCCC
AGAAAACTGC GGTTTCTGTG GGAGAACAGA AGGGGAAAGG GTCTTAACTG GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT AGTGTATTT TGCATTTTA AAACTTGACG TGCTGTATTG TACTAAATTA AGTGTAATCT ATTAAAGCAA GGTATACACA ATTTGCTTTG AAACTTACTA BO1 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT CTCGTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTCTG TAAAATATTT CTGAATCTATA GGCTGTGGGT TTCATTTTTCT TAAAAGTATTT TGTCTGGATG TTCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA TTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAAATG TTTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAAATCC	3401	AAAGGGATAT	AAGAGGGGCA	GGCCACTCTT	AAGAAGAATG	CGAGCTTTCT
3551 GGAAAGGGCT CTGTGTGGTA ACACCTCAGT TGTGTTCTCC TGACACCAGG 3601 AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG 3651 ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT 3701 AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA 3751 AGTGTAATCT ATTAAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG	3451	ACATTGGGAC				
AAAAGAGAGG GATCAGCTTC AATAACTAGA AAATTCTGGC TGTTTAATGG ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT AAACTTTGGT AAAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA AGTGTAATCT ATTAAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA BO1 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC B51 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT CTCCTTATTT CTTGGCACTT GTATACAAGT GTATTCAGGC GCATGAGCTA TTCTTTCTG TAAAATATTT GGTGTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT CTCATTTTTTCTT GAAACTTT TGTCTGGATG TTCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATGC TTTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACCC	3501	AGAAAACTGC			AGGGGAAAGG	GTCTTAACTG
ACTCTTTGGT GGCCTCTTTA AGGCAAAGCA GAGAAAGCAA ATTATGTATT AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA AGTGTAATCT ATTAAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA BO1 TGTTTATTCT ATTATAAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC B51 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT CTCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT GTATCAACA GCTGTGGGT TTCATTTTCTG TAAAATATTT GGTGACTATA GGCTGTGGGT TTCATTTTTTG AAAAGTATTT TGTCTGGATG TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA CTGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATGC TTTTTTTCTT CCTGTCACCG CAGTGTGGG TATTGCATAA TGTGAATACCC TTTTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	3551	GGAAAGGGCT	CTGTGTGGTA	ACACCTCAGT	TGTGTTCTCC	TGACACCAGG
AAGTGTATTT TGCATTTTTA AAACTTGACG TGCTGTATTG TACTAAATTA A751 AGTGTAATCT ATTAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG	3601	AAAAGAGAGG	GATCAGCTTC	AATAACTAGA	AAATTCTGGC	TGTTTAATGG
3751 AGTGTAATCT ATTAAGGCAA GGTATACACA ATTTGCTTTG AAACTTACTA 3801 TGTTTATTCT ATTATAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTTCTT CCTGTCACCG CAGTGTGGG TATTGCATAA TGTGAATACC	3651	ACTCTTTGGT	GGCCTCTTTA	AGGCAAAGCA	GAGAAAGCAA	ATTATGTATT
3801 TGTTTATTCT ATTATAAGT GTATTCAGGT GCAACACAGA GACTGCTTTC 3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTTCTT CCTGTCACCG CAGTGTGGG TATTGCATAA TGTGAATACC	3701	AAGTGTATTT	TGCATTTTTA	AAACTTGACG	TGCTGTATTG	TACTAAATTA
3851 GGTGACATTA ATGAAGAAAA TTTCTCATGC CAGGCTTTAT TATAGAATCT 3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTCTT CCTGTCACCG CAGTGTGGG TATTGCATAA TGTGAATACC	3751	AGTGTAATCT	ATTAAGGCAA	GGTATACACA	ATTTGCTTTG	AAACTTACTA
3901 TCAGCTAAAA TCCTAACTTT CTCCTTATTT CTTGGCACTT GTATACAAGT 3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	3801	TGTTTATTCT	ATTATAAAGT	GTATTCAGGT	GCAACACAGA	GACTGCTTTC
3951 GGTGTTGCCT CTTAGGGCAG GCATGAGCTA TTCTTTTCTG TAAAATATTT 4001 TGAATCTATA GGCTGTGGGT TTCATTTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	3851	GGTGACATTA	ATGAAGAAAA	TTTCTCATGC	CAGGCTTTAT	TATAGAATCT
4001 TGAATCTATA GGCTGTGGGT TTCATTTTTG AAAAGTATTT TGTCTGGATG 4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	3901	TCAGCTAAAA	TCCTAACTTT	CTCCTTATTT	CTTGGCACTT	GTATACAAGT
4051 TCTTTCAAAC TAGCTTCAGA TATTATTTAA TACTATGTAA CTGGGTCCCC 4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	3951	GGTGTTGCCT	CTTAGGGCAG	GCATGAGCTA	TTCTTTTCTG	TAAAATATTT
4101 TATGGCTCAA TCAATATTGC TTATTTTCT TCTGTAGTGG ATGTGAAATT 4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	4001	TGAATCTATA	GGCTGTGGGT	TTCATTTTTG	AAAAGTATTT	TGTCTGGATG
4151 TCCTTTAGTT GGATAAGATA CACTGTAATA ATTTTAATGC TAATTAATGA 4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	4051	TCTTTCAAAC	TAGCTTCAGA	TATTATTTAA	TACTATGTAA	CTGGGTCCCC
4201 TATTTCATAC TGTGCAATGA ACAGATAATT TAACACTGTA TTTTGAAATG 4251 TTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	4101	TATGGCTCAA	TCAATATTGC	TTATTTTTCT	TCTGTAGTGG	ATGTGAAATT
4251 TTTTTTCTT CCTGTCACCG CAGTGTGTGG TATTGCATAA TGTGAATACC	4151	TCCTTTAGTT	GGATAAGATA	CACTGTAATA	ATTTTAATGC	TAATTAATGA
	4201	TATTTCATAC	TGTGCAATGA			
4301 TGTAAAAATA TAAATTACTT AAAAATAAAA ATATGACCAA TTGGTATCAG	4251	TTTTTTTTTT	CCTGTCACCG	CAGTGTGTGG	TATTGCATAA	TGTGAATACC
	4301	TGTAAAAATA	TAAATTACTT	AAAAATAAAA	ATATGACCAA	TTGGTATCAG

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Figure 15: SEQ ID NO. 7

Length: 50 bp

1 GGAGAGAGCACCACTGTAAACTGAAGTCAAATAAATTCAGCTCTTAATG

-20/26-

Fig. 16: Alignment of SEQ ID NO. 7 with human MAGUIN-1 cDNA

Length: 50 bp

Fig. 17: Schematic alignment of SEQ ID NO. 5, SEQ ID NO. 6 and SEQ ID NO. 7 with Genome Database EST-cluster

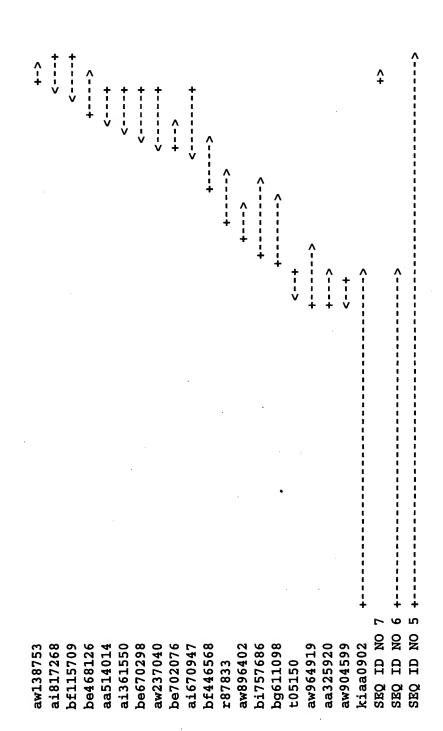


Fig. 18: Images of the human cerebral cortex labeled with anti-Maguin-1 antiserum 2 and with DAPI B

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Table 1:

sample	Δ (fold) (frontal / temporal cortex)
patient P01	
patient P01	10 4.14
patient P01 patient P01	
patient P01	
control C0	12 1.29
control C0	05 1.36
control C0	08 1.15

Table 2:

sample (fro	Δ (fold) (frontal cortex / hippocampus)	
patient P012	1.37	
patient P016		
patient P010		
patient P011	2.28	
patient P014	1.21	
patient P019		
control C005	1.74	
control C008	0.39	
control C004	0.87	

Table 3:

sample (from	Δ (fold) (frontal / temporal cortex)	
patient P012	2.68	
patient P016	2.72	
patient P010	11.73	
patient P011	2.44	
patient P014	1.77	
patient P017	3.43	
patient P019	4.02	
control C011	1.42	
control C012	1.22	
control C014	0.30	
control C005	0.92	
control C008	0.81	

Table 4:

sample	Δ (fold)
	(frontal cortex / hippocampus)

patient P012	1.57
patient P016	4.38
patient P010	9.08
patient P011	4.53
patient P014	0.72
patient P019	1.37
control C005	1.84
control C008	0.46
control C004	1.69

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